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10/563,987	01/10/2006	Sumihito Sago	126249	7109

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EXAMINER	
ABRAHAM, AMJAD A	

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1791	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/563,987	SAGO ET AL.	
	Examiner	Art Unit	
	AMJAD ABRAHAM	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) *10-19* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 20-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 January 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/07/2008, 07/13/2007, and 01/10/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's remarks and amendments, filed on December 04, 2008, have been carefully considered. Claims 11-19 have been canceled by the applicant while claims 20-24 have been added by applicant. Therefore, claims 1-10 and 20-24 are now pending.

Election/Restrictions

1. Applicant's election with traverse of Group I claims 1-10 on December 04, 2008 is acknowledged. The traversal is on the ground(s) that claims 1-19 are sufficiently related and do not render the Patent office with a serious burden. This is not found persuasive because the methods described by Group I and Group II are drawn to two distinctly different processes for forming a dual ceramic layer dental prosthetic. The only common technical feature described by both methods is that of a method for forming a dual ceramic layer dental prosthetic. This common technical feature is well known in the art and shown in USP No. 6,740,267 (See abstract and figure 1), USP No. 3,934,348 (see abstract and figures 3-7), and JP H06-269466 (See abstract). Other than the common technical feature the methods of claims 1-10 and 11-19 depart substantially in that the first group requires a casting process while the second group can be accomplished by any forming process such as injection molding.

The requirement is still deemed proper and is therefore made FINAL.

Specification

2. Examiner withdraws the objection to the abstract as stated in the previous office action dated September 04, 2008 due to applicant's submission of a new abstract.

Claim Objections

3. Examiner withdraws the objection to claim 7, as stated in the previous office action dated September 04, 2008 due to applicant's submission amendment to claim 7.

New Grounds of Rejections

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1, 3, 7, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janjic (USP No. 3,934,348).

7. Regarding claim 1, Janjic teaches a method for manufacturing a dental prosthesis. **(See abstract)**.

a. Janjic further teaches

i. A step of preparing a substrate of the dental prosthesis that is constituted by a dental molding material. **(See three metallic layers that together comprise the substrate in figures 3-5 and abstract.)**

(1) According to applicant- any material can be used as the substrate. **(See page 14 of applicant's specification- paragraph [0036])**.

ii. A step of forming a back coating layer on the substrate of a first **(opaque)** porcelain. **(See figure 8 and volume 1 lines 48-54)**.

(2) One having the ordinary skill in the art would know that porcelain is made of ceramic material.

iii. A step of forming a casting mold **(die mold- See column 1 lines 33-38 disclosing that the dentist forms a mold from hard dental plaster.)** and having the substrate and the back coating layer being disposed in the casting mold such that a void is provided on the back coating layer. **(See figure 2 which shows a molding die with a female and male part)**.

(3) Also see figures 3-6 showing the substrate and back coating being disposed in the die mold (cast mold).

(4) Casting is defined to give a shape to (a substance) by pouring in liquid or plastic form into a mold and letting harden without pressure. **(Merriam-Webster Online Dictionary)**.

iv. A step of forming a cast coating layer **(Regular Porcelain Layer)** on the back coating layer **(Opaque Porcelain Layer)** by applying the regular porcelain into the void of the casting mold.

b. With respect to claim 1, Janjic does not explicitly teach wherein the second porcelain **(regular porcelain)** is constituted by ceramic whose composition is different from that of the ceramic material of the first porcelain **(opaque porcelain)**, such that the viscosity of the second porcelain is lower than that of the first porcelain at the same casting temperature.

c. However, Janjic does teach that the casting (baking) temperature for the first (opaque) porcelain layer is higher than that of the second (regular) porcelain layer. **(See column 1 lines 48-62)**.

v. When applying layers of porcelain by layering (brushing on) or casting it is important product design consideration to ensure that the viscosity of the underlying layer (back coating layer) is higher than that of the casted layer to ensure that during the casting process the underlying layer will not move or deform during the casting process. As Janjic teaches the underlying layer (opaque porcelain layer) is baked to a

temperature of 1825 F. While the casted layer (regular porcelain) needs only to bake at 1700 F. As the casting temperature is only 1700 F, one having the ordinary skill in the art would have realized that the underlying layer (opaque layer) would be more viscous that the casting layer (regular layer) at 1700 F. Since the underlying layer needed to be baked (becomes a solid) at a temperature of 1825 F, it still would be viscous (liquid) at 1700 F. While the casted layer is baked solid at 1700 F. Therefore the viscosity of the underlying layer must be higher than the casting layer due to the baking temperatures used in Janjic at a casting temperature of 1700F. It would be obvious to one having the ordinary skill in the art that the regular porcelain layer addition could not disturb the opaque layer during the casting process. The motivation for doing so would be to create a uniform product whose layers where the same thickness throughout the product.

8. Regarding claim 3, Janjic teaches wherein the substrate is made of metal. **(See column 1 lines 30-43 and figures 3-5)**.

9. Regarding claim 7, Janjic teaches the components needed to forming a dental prosthesis that includes the use of an armored portion **(metal substrate)** and at least two ceramic coating layers. **(See abstract and figure 9)**.

d. Janjic also teaches

vi. A step of preparing a substrate of the dental prosthesis that is constituted by a dental molding material. **(See three metallic layers that together comprise the substrate in figures 3-5 and abstract.)**

(5) According to applicant- any material can be used as the substrate. **(See page 14 of applicant's specification- paragraph [0036])**.

vii. A step of forming a back coating layer on the substrate of a first **(opaque)** porcelain. **(See figure 8 and volume 1 lines 48-54)**.

(6) One having the ordinary skill in the art would know that porcelain is made of ceramic material.

viii. A step of forming a cast coating layer **(Regular Porcelain Layer)** on the back coating layer **(Opaque Porcelain Layer)** by applying the regular porcelain into the void of the casting mold.

e. With respect to claim 7, Janjic does not explicitly teach wherein the second porcelain **(regular porcelain)** is constituted by ceramic whose composition is different from that of the ceramic material of the first porcelain **(opaque porcelain)**; such that the viscosity of the second porcelain is lower than that of the first porcelain at the same casting temperature.

f. However, Janjic does teach that the casting temperature for the first (opaque) porcelain layer is higher than that of the second (regular) porcelain layer. **(See column 1 lines 48-62)**.

ix. Specifically, Janjic discloses wherein the final temperature of the opaque porcelain is 1825 F. While the final temperature of the regular porcelain only needs to be 1700 F. From this, it would be clear that at 1700 F the viscosity of the regular porcelain would be higher than that of

the opaque porcelain. One having the ordinary skill in the art would realize that the regular porcelain layer addition could not disturb the opaque layer during the casting process. The motivation for doing so would be to create a uniform product whose layers where the same thickness throughout the product.

10. Regarding claims 20-21, Janjic does not explicitly teach: (1) wherein the step of forming the back coating layer, the first porcelain layer is burned at a burning temperature of 900 to 1100 C and (2) wherein the step of forming the cast coating layer, the second porcelain is softened at a heating temperature of 800 to 1200 C.

g. However, Janjic does teach that the first (opaque) layer is baked starting at 800 F to 1825 F (430C to 1000 C). In addition, the second layer (regular) is baked at a temperature of 800 F to 1700 F. **(See column 1 lines 47-63)**.

h. It would have been obvious to one having the ordinary skill in the art at the time of the invention to adjust the casting temperature for the intended application, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)*.

11. Regarding claim 22, Janjic teaches that the cast coating layer (regular) is formed and covers the entire surface of the back coating layer (opaque). **(See figures 7 and 9)**.

12. Claims 2 and 23-24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Janjic (USP No. 3,934,348) in view of Fukuda et al. (Japanese Patent Publication 06-269466—made of record by the applicant).

13. Regarding claim 2, Janjic does not teach wherein the casting mold forming step includes: (1) a sub-step of forming, on at least a part of the surface of the back coating layer, a model layer made of a material that is eliminable by burning thereof, (2) a sub-step of embedding the model layer in a matrix constituting the casting mold; and a (3) sub-step of forming the casting mold, which is provided with the void corresponding to the model layer, by burning and eliminating the model layer after hardening the matrix.

i. However, Fukuda discloses this process which mimics the well known lost wax molding process. Fukuda discloses a process for forming an model layer of wax (32) onto the back coating layer **(1st casting layer- part # 31)**. Fukuda further discloses the embedding the model layer into a casting mold and burning the wax material leaving the 1st casting material in a casting mold. **(See drawings 3-4 and paragraphs [0036-0037])**.

j. Janjic and Fukuda are analogous art because they are from the same field of endeavor which is casting porcelain layers onto a substrate. At the time of the invention, it would have been obvious to one having the ordinary skill in the art to use the lost wax molding process to dispose of the porcelain layer and substrate into a casting mold. Lost wax molding is well known in the art, specifically in the use of making dental prosthesis.

14. Regarding claim 23, Janjic does not teach in the step of forming the casting mold, the casting mold has a porcelain introducing passage communicating the void with an outside.

k. However, Fukuda teaches the step of forming the casting mold, the casting mold has a porcelain introducing passage communicating the void with an outside. **(See drawing 4)**.

l. Janjic and Fukuda are analogous art because they are from the same field of endeavor which is casting porcelain layers onto a substrate. At the time of the invention, it would have been obvious to one having the ordinary skill in the art to use the lost wax molding process to dispose of the porcelain layer and substrate into a casting mold. Conventional lost wax molds have a path which allows the material to be cast to be introduced into the material.

15. Regarding claim 24, Janjic does not teach wherein the model layer is formed to have a configuration corresponding to the configuration of the cast coating layer.**(See drawing 4- showing the cavity that is left after burning the material in which the cast coating layer is added to)**.

m. Janjic and Fukuda are analogous art because they are from the same field of endeavor which is casting porcelain layers onto a substrate. At the time of the invention, it would have been obvious to one having the ordinary skill in the art to use the lost wax molding process to dispose of the porcelain layer and substrate into a casting mold. Conventional lost wax molds are created sp that the burned out portion leaves the desired mold cavity.

16. Claims 4, 6, 8, 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Janjic (USP No. 3,934,348) in view of Sekino et al. (USP No. 6,740,267).

17. Regarding claims 4 and 8, Janjic does not teach wherein the first porcelain is provided by porcelain whose viscosity at the casting temperature is at least 1.5 times as high as that of the second porcelain.

n. However, Sekino teaches wherein the first porcelain is provided by porcelain whose viscosity at the casting temperature is at least 1.5 times as high as that of the second porcelain. **[(Column 2, lines 20-25 -- shows that the additional ceramic layer is poured into the mold at a viscous state of 10^2 to 10^6) while (Column 4, lines 15-20 -- states that during the molding of the ceramic core the viscosity of the ceramic is between 10^2 to 10^9)→ this shows that the first porcelain layer (core) can have a higher viscosity(1.5 times and higher) than the 2nd layer]**

o. Janjic and Sekino are analogous art because they are in the same field of endeavor of building a multi ceramic layer dental prosthesis. Sekino teaches that the ceramic core and the additional layers of ceramic material are to be different and that the viscosity range is between 10^2 to 10^9 poises. Furthermore, Janjic teaches that the dual ceramic layers are baked at different temperatures. Clearly they must have different viscosities. It would have been obvious to one having the ordinary skill in the art at the time of invention to adjust the viscosity range for

the intended application, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).*

x. Adjusting the viscosity of ceramic material and choosing/applying the suitable numerical range, when forming the dental prosthetic which has a two-layer structure is a matter of design which one having the ordinary skill in the art can make.

18. Regarding claims 6 and 10, the combination of Janjic does not teach wherein the viscosity of the first porcelain at the casting temperature ranges from 2 X10^6 (cP) to 5X10^7 (cP), while the viscosity of the second porcelain at the casting temperature ranges from 1X10^6 (cP) to 3X10^7 (cP).

p. However, Sekino teaches wherein the viscosity of the first porcelain at the casting temperature ranges from 10^2 to 10^6 poises, while the viscosity of the second porcelain at the casting temperature ranges from 10^2 to 10^9 poises. **[(Column 2, lines 20-25 -- shows that the additional ceramic layer is poured into the mold at a viscous state of 10^2 to 10^6) while (Column 4, lines 15-20 -- states that during the molding of the ceramic core the viscosity of the ceramic is between 10^2 to 10^9)]**

q. Janjic and Sekino are analogous art because they are in the same field of endeavor of building a multi ceramic layer dental prosthesis. Sekino teaches that the ceramic core and the additional layers of ceramic material are to be different and that the viscosity range is between 10^2 to 19^9 poises. Furthermore, Janjic

teaches that the dual ceramic layers are baked at different temperatures. Clearly they must have different viscosities. It would have been obvious to one having the ordinary skill in the art at the time of invention to adjust the viscosity range for the intended application, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)*.

xi. Adjusting the viscosity of ceramic material and choosing/applying the suitable numerical range, when forming the dental prosthetic which has a two-layer structure is a matter of design which one having the ordinary skill in the art can make.

19. Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janjic (USP No. 3,934,348) in view of Brodkin et al. (USP No. 6,428,614).

r. Regarding claims 5 and 9, Janjic does not teach wherein the first porcelain has, as a main component, a glass composition that is essentially constituted by oxides having respective percentage contents as follows:
SiO2 40-75 (mass %); A1203 10-20 (mass %); K20 5-15 (mass %); Na20 2-10 (mass %); Li20 0.1-2 (mass %); ZrO2 0-7 (mass %); CaO 0-5 (mass %); MgO 0-5 (mass %); and SnO2 0-30 (mass %); wherein the second porcelain has, as a main component, a glass composition that is essentially constituted by oxides having respective percentage contents as follows: SiO2 6-70 (mass %); A1203

10-20 (mass %); K20 5-15 (mass %); Na20 3-15 (mass %); Li20 0.1-3 (mass %); ZrO2 0-3 (mass %); CaO 0.1-5 (mass %); MgO 0.1-5 (mass %); B203 0-3 (mass %); CeO2 0-3 (mass %); and Sb203 0-7 (mass %).

s. However, Brodkin teaches wherein the first porcelain has, as a main component, a glass composition that is essentially constituted by oxides having respective percentage contents as follows: SiO2 40-75 (mass %); A1203 10-20 (mass %); K20 5-15 (mass %); Na20 2-10 (mass %); Li20 0.1-2 (mass %); ZrO2 0-7 (mass %); CaO 0-5 (mass %); MgO 0-5 (mass %); and SnO2 0-30 (mass %); wherein the second porcelain has, as a main component, a glass composition that is essentially constituted by oxides having respective percentage contents as follows: SiO2 6-70 (mass %); A1203 10-20 (mass %); K20 5-15 (mass %); Na20 3-15 (mass %); Li20 0.1-3 (mass %); ZrO2 0-3 (mass %); CaO 0.1-5 (mass %); MgO 0.1-5 (mass %); B203 0-3 (mass %); CeO2 0-3 (mass %); and Sb203 0-7 (mass %). **(See Tables 3 and 6 showing the composition of the body and incisal porcelain vs. opaque porcelains).** .

t. It would have been obvious to ones skilled in the art to modify Janjic with the teachings of Brodkin for the benefit of a dual layer ceramic which has different physical properties. The compounds are well known for use in making ceramic dental components. One having the ordinary skill in the art of making dental ceramics would know to alter these metal oxide compositions in order to change a physical property like that of viscosity. All the claimed elements were known in the prior art and one skilled in the art could have combined the

elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of invention.

Response to Arguments

20. Applicant's arguments filed December 4, 2008 have been fully considered but they are not persuasive and/or moot due to new grounds of rejections.

21. **Applicant Argument #1:** "That Janjic fails to teach (1) forming a back coating layer, (2) forming a casting mold with a void, and (3) forming at least two coating layers on the substrate."

u. Applicant's main concern seems to be a general confusion as to what is and is not casting. As supplied above (in paragraph 7 (a) (iii) (4)), casting is defined to give a shape to (a substance) by pouring in liquid or plastic form into a mold and letting harden without pressure. **(Merriam-Webster Online Dictionary)**. Janjic describes this type of casting. In Janjic, a casting mold is formed (as seen in figure 2). The sole purpose of the mold discussed in Janjic is to give a shape to a ceramic liquid which is applied to the substrate and 1st ceramic layer (opaque layer). There is no injection means that would distinguish said mold from a casting mold. Moreover, Janjic clearly shows that a substrate and a back coating layer (opaque layer) are disposed inside the casting mold. (See figures 3-6). The substrate is the platinum and gold crust layers while the opaque porcelain layer is the back coating layer. Finally, Janjic clearly shows

that the regular porcelain layer is then added to the opaque porcelain layer thus creating a dual ceramic layer article.

22. **Applicant Argument #2:** "That Janjic does not teach disposing the substrate and back coating layer in the casting mold."

v. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., disposing the substrate and the 1st porcelain later by a lost wax process) are not recited in claim 1. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

w. In sum, the limitation "disposed" is not limited to only the lost wax process. Janjic discloses the addition of the substrate and 1st layer by brush or equivalent means. This is satisfactory to read on the limitation "disposed."

23. **Applicant Argument #3:** "That the mold of Janjic is not a casting mold because there is no porcelain introducing path." (See page 12 paragraph 2 of applicant's remarks).

x. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. a casting process needs a porcelain introducing path) are not recited in claim 1. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

24. **Applicant Argument #4:** "That applicant obtains results that are not contemplated in the prior art—specifically that the viscosity difference in the porcelain layers allow the casting process to proceed after the addition of a second layer without disturbing the first porcelain layer.

y. In response to applicant's argument that the viscosity difference in the porcelain layers allow the casting process to proceed after the addition of a second layer without disturbing the first porcelain layer, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

z. However, this advantage is obvious and suggested by the prior art. In this case, Janjic has suggested both the use of two different ceramic/porcelain layers as well as the fact that the second layer (regular layer) has a lower casting/baking temperature than that of the first (opaque) layer. Clearly, one skilled in the art would have known that there would be a viscosity difference and that one would not want to disturb the first layer when adding the second layer.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMJAD ABRAHAM whose telephone number is (571)270-7058. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip Tucker can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AAA

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791